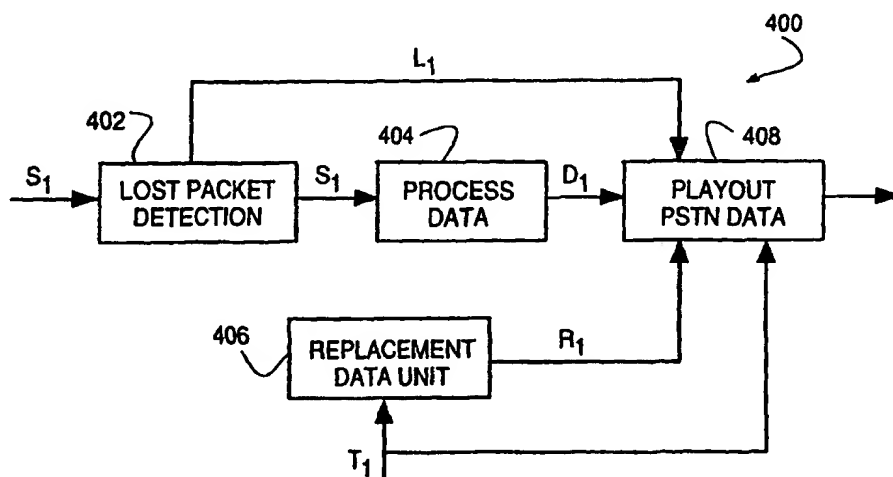




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(54) Title: METHOD AND APPARATUS FOR REPLACING LOST PSTN DATA IN A PACKET NETWORK



(57) Abstract

A method and apparatus for replacing lost PSTN data in a packet network and for generating variable power white noise are disclosed. In one embodiment, the method for replacing data includes the steps of receiving data packets, detecting lost data packets, and producing in response a lost data output indicating when replacement data needs to be provided. The method preferably generates the replacement data by re-using data stored in an extended playback buffer (with the re-used replacement data starting with the oldest output data byte stored in the extended playback buffer), and placing the re-used replacement data on an external network. Another aspect of the invention is a variable power white noise generator for providing replacement data. The variable power white noise generator may use, for example, a multi-bit register that stores a magnitude, and a pseudo-random sign bit generator to change the positive and negative sense of the magnitude. In one preferred embodiment, a linear feedback shift register (LFSR) is used in conjunction with a feedback network corresponding to a polynomial generating function. The pseudo-random output sequence of the LFSR then produces a pseudo-random output bit to control the positive and negative sense of the magnitude bits.